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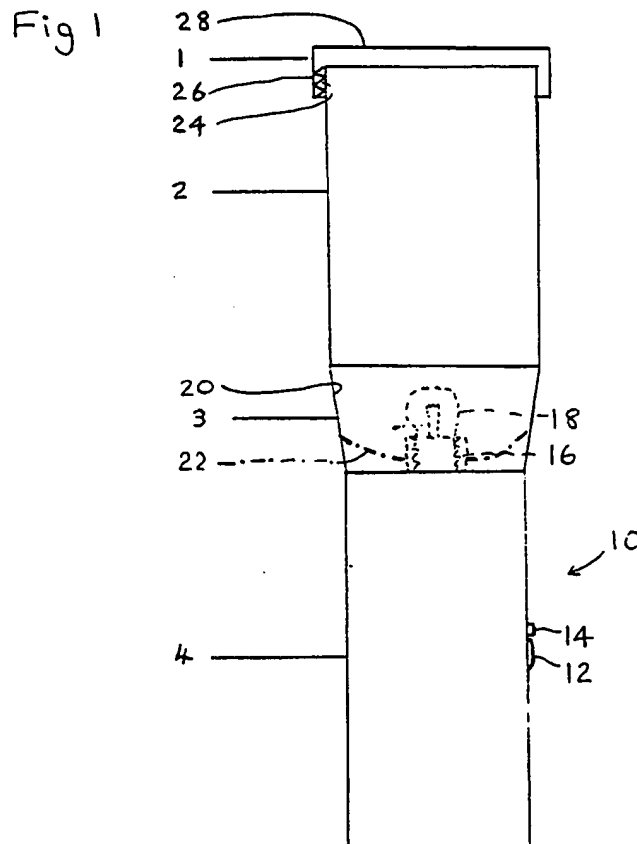
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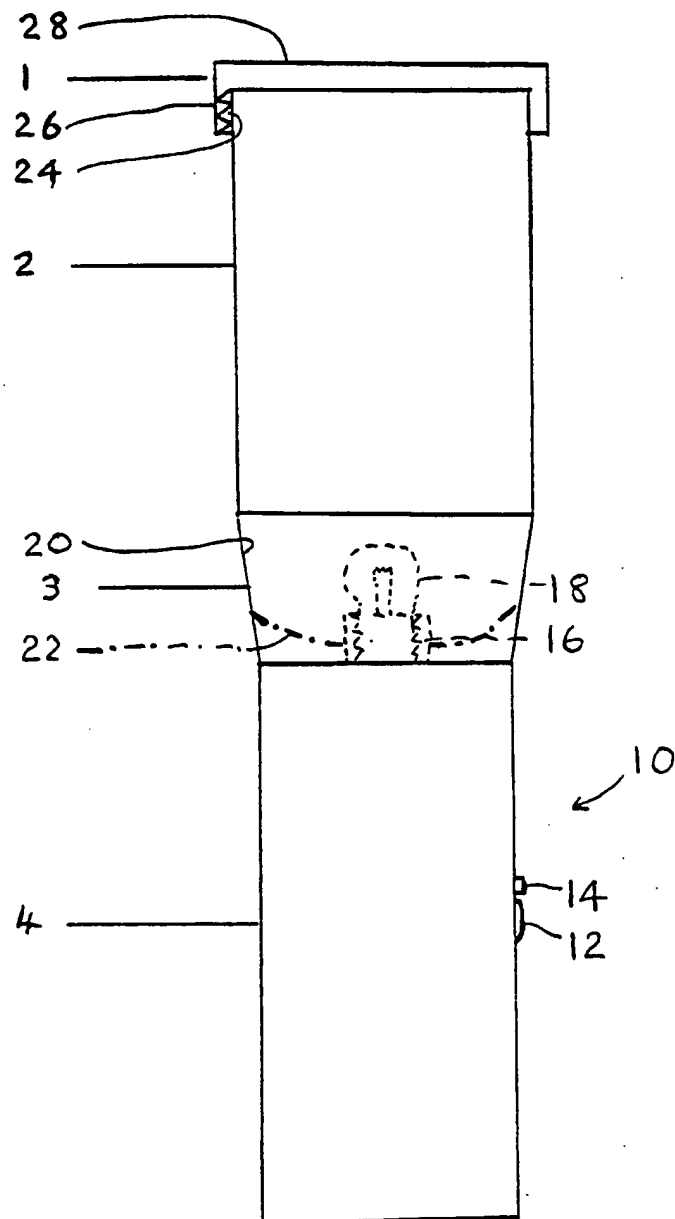
(54) **Torch**

(57) A torch for projecting images has a bulb holder (18) whose reflector (3, 22) is removed or rendered non-reflective. An extension tube (2) extends forwardly and carries an image-bearing translucent plate (1) in front of the bulb (18) at a sufficient distance for the bulb's light to be capable of projecting an image.



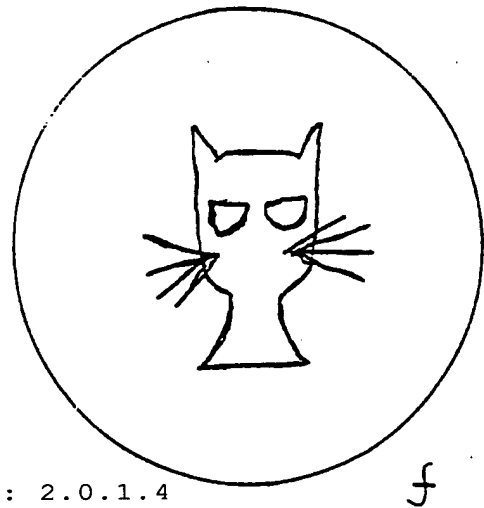
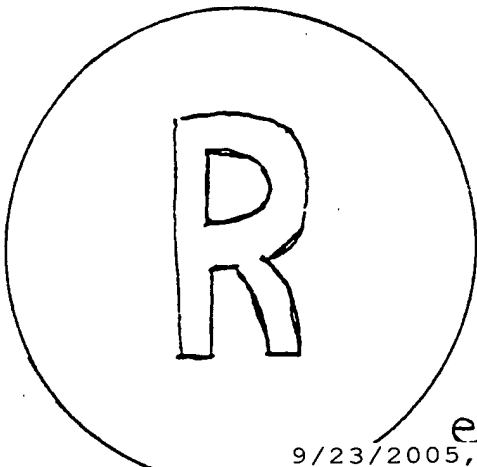
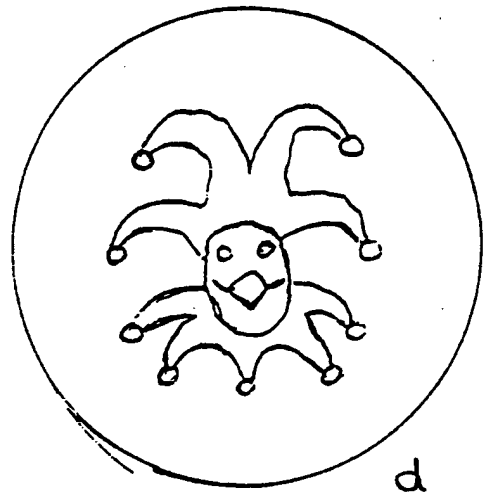
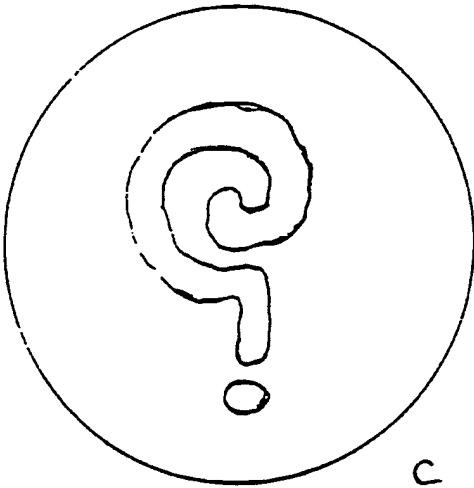
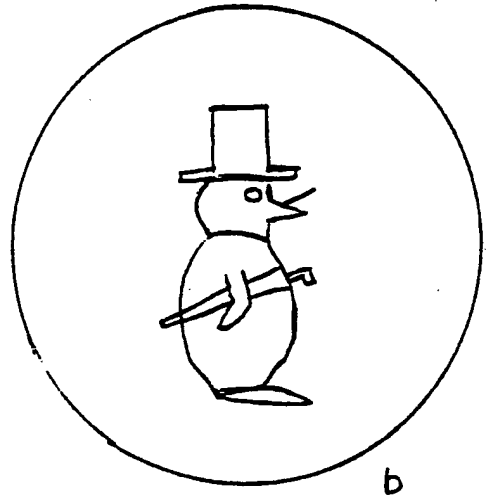
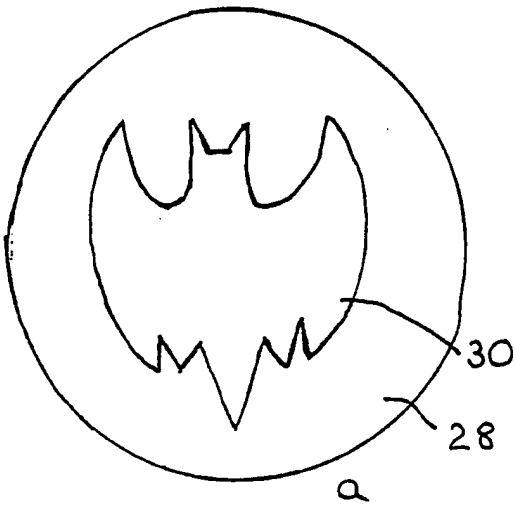
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Fig 1



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Fig 2



TORCH

The present invention relates to torches and particularly to novelty torches by means of which images  
5 can be projected.

A conventional torch has a body which provides a battery housing, a bulb holder, and a switch for controlling the connection of batteries in the housing to a bulb in the holder. Associated with the bulb holder  
10 there is generally a concave reflector of chromed metal or the like arranged to throw light from the bulb forwards. A front cover may be mounted in front of the reflector, providing a colourless glass or plastic end face, which may be shaped to act as a lens.

15 A torch embodying the invention differs from the above in that (a) there is no reflector, the internal surfaces of the assembly adjacent the bulb being substantially non-reflective; and (b) an image-bearing plate is mounted in front of the bulb with a relatively  
20 great spacing, such that light from the bulb can project the image, e.g. onto a wall.

In another aspect the invention provides a method of adapting a conventional torch which comprises removing or rendering substantially non-reflective the reflector  
25 thereof; and mounting a spacer tube which is adapted to carry an image bearing plate so that this is held

relatively far in front of the bulb.

The invention will now be described in greater detail with reference to the accompanying drawings in which;

5        Fig. 1 is a schematic elevation of a torch embodying the invention; and

Fig. 2 is a plan view of a range of interchangeable image-bearing plates.

A torch has a body 10 which provides a cylindrical battery housing 4 with an on-off switch 12 and a flash button 14. At one end the body has a bulb holder 16 for holding a conventional bulb 18 so that this can be powered by the batteries under control of the switch or switches 12, 14. The holder and bulb project within a short frustoconical tube 3. In a normal torch this is a reflector, with a reflective inner surface 20, and there may also be a dished reflector portion 22 generally behind the bulb. But in this case the tube 3 has a non-reflective (e.g. matt black) surface 20. The dished portion 22 may be present or absent. If present it too may have a non-reflective (front) surface. The tube 3 leads to a cylindrical extension tube 2 (whose internal surface may likewise be non-reflective). At its outer end this has an external thread 24 by means of which an image bearing plate 1 with an internally threaded flange 26 is releasably and interchangeably mounted. The plate

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1 has a major plate portion 28 which is partly clear or coloured and partly opaque or (contrastingly) coloured, to form a design 30. Examples a - f are shown in Fig. 2. The arrangement is such that light from the bulb 18 becomes a beam carrying the image of the design 30 which can be displayed on a suitable surface.

A conventional torch can be converted to an embodiment of the invention by removing the front cover, blackening the reflector, and mounting an extension tube 3 and plate 1.

CLAIMS

1. A torch having a body which provides a battery housing, a bulb holder, and switch means for controlling electrical connection of battery means in the housing to a bulb in the holder; a spacer mounted to the body so as to extend forwardly of the holder; and an image bearing plate carried by the spacer in front of the holder and spaced therefrom; the arrangement being such that a bulb in the holder is adjacent substantially non-reflective surfaces and is at such a distance from the image bearing plate that the image can be projected by light from the bulb.
2. A torch according to claim 1 having a plurality of interchangeable image bearing plates.
3. A torch substantially as herein described with reference to and as illustrated in the accompanying drawings.
4. A method of producing a torch according to any preceding claim which comprises providing a torch having a battery housing; a bulb holder; switch means for controlling electrical connection of battery means in the housing to a bulb in the holder, and a reflector; removing the reflector or rendering it substantially non-reflective; and mounting a spacer and an image bearing plate.